

Fig.1

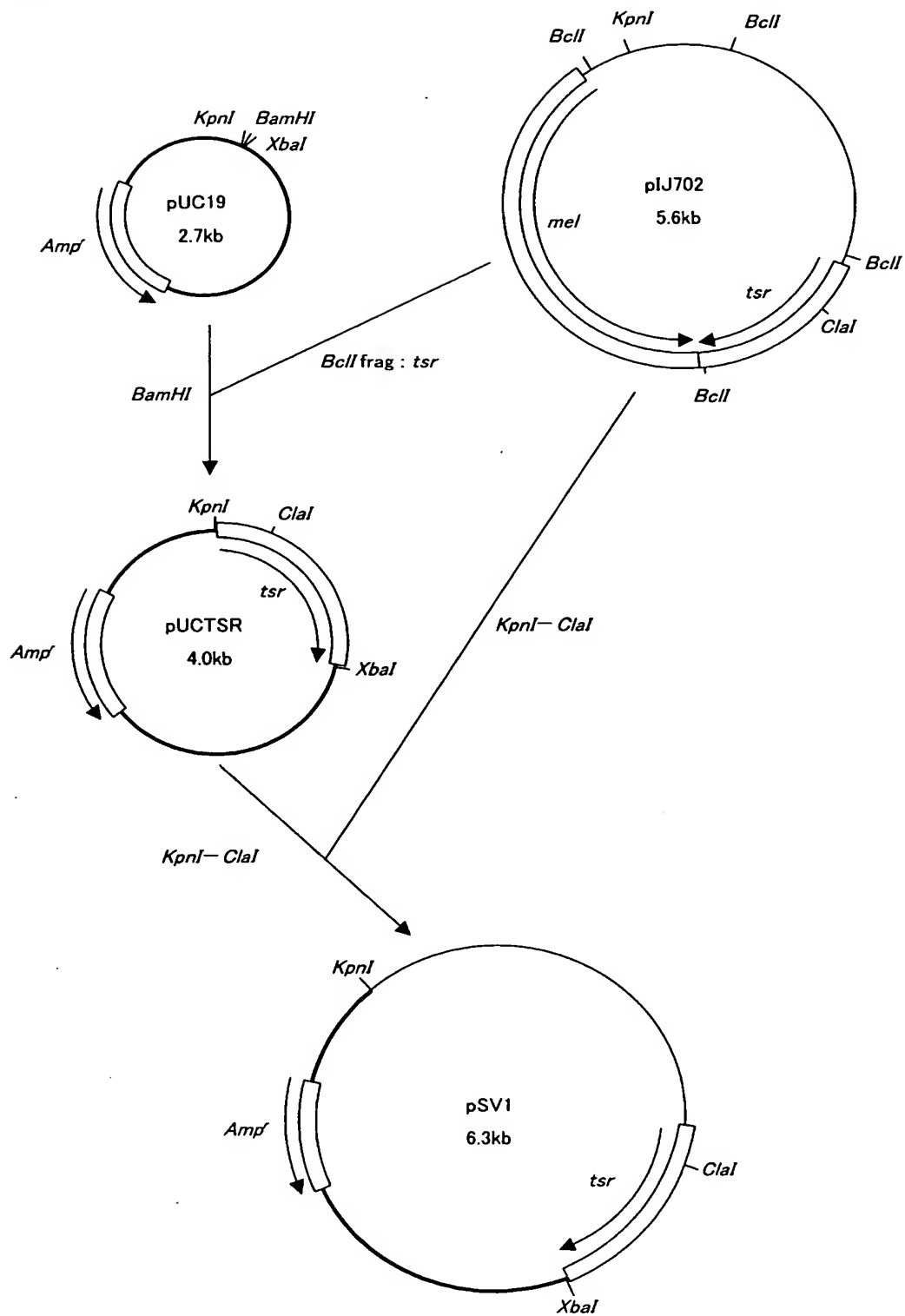


Fig.2

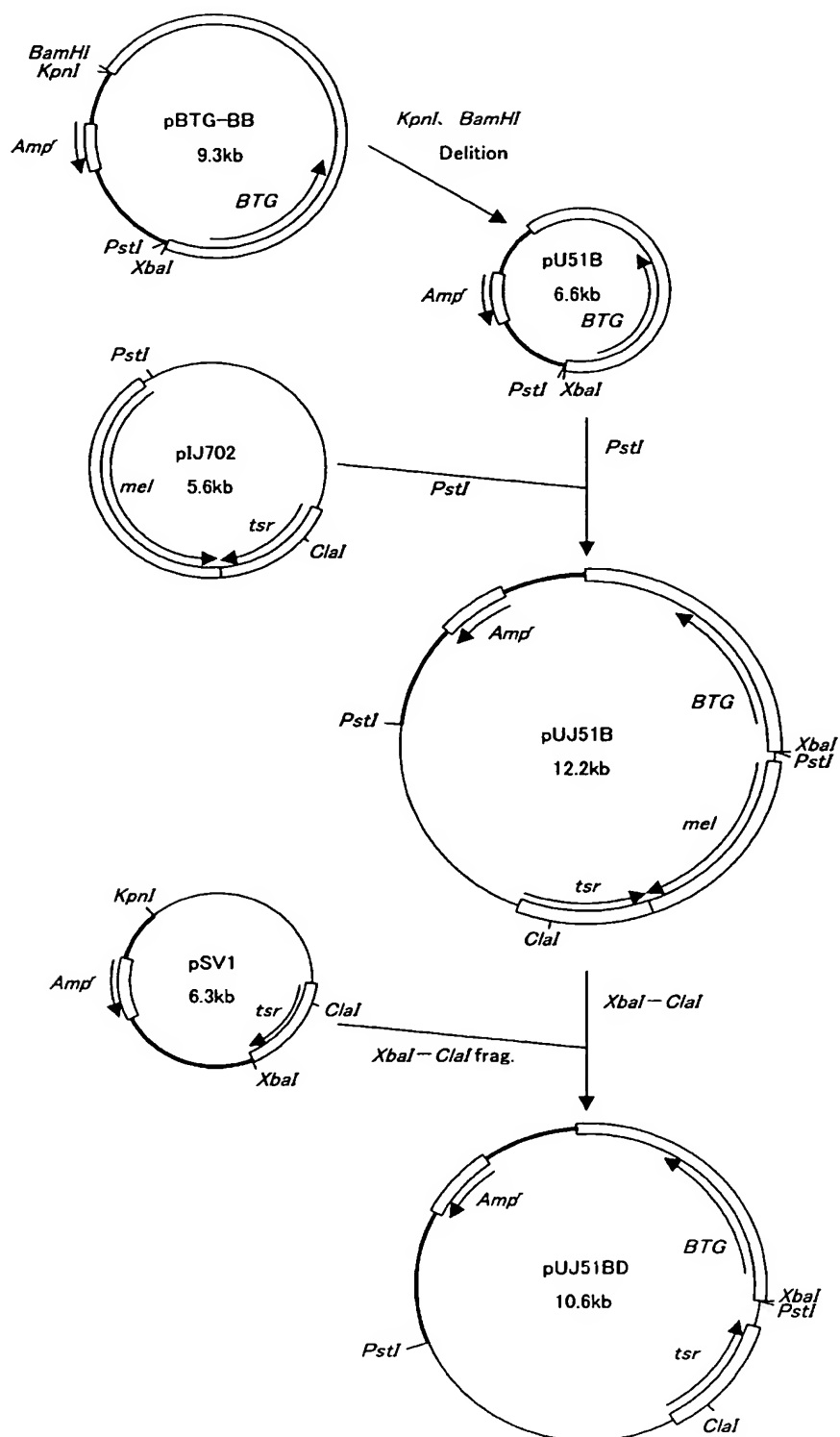


Fig.3

Sequence Range: 1 to 669

10	20	30	40	50	60
GATCTTCCGG	GACATCTGAG	GCGCCGAGG	CGATCCGAGG	CGCCCAGGC	GTCTGCGCGA
70	80	90	100	110	120
AGGGCGCCGC	CGTGCCGTCC	ATCCCCGTCC	GCGTCGACGC	GGGCCGGGAG	GGGGTGCGGC
130	140	150	160	170	180
GGCGCCCTTC	GGCTGTGTGG	ACGAAGCGTC	GGGTCGGAGG	GGCGGCCGGA	TATCGTCCTT
190	200	210	220	230	240
GGGGCGGGGT	GGCCGGAATT	GCCGCCATGG	TGTTGCCGGG	GAATCGACCC	GAAGACATGA
250	260	270	280	290	300
TCACTTCTCG	TATCCACCCG	ATCACGTATC	CGGGAGTCGA	GAAGTGTTAC	GCCGTGCCCC
310	320	330	340	350	360
TGTCCGCGTC	CTCACCCCTG	TCGCCGTGAC	AGCGACCCGC	GTTCTTCCAC	TCGCACGGAC
370	380	390	400	410	420
GGCCCCACAG	GACCTTTCGG	CCCGGGCTCG	CCCCGCCGCC	TCGGTGACGG	CCTCCGAATA
430	440	450	460	470	480
ACGCGGCCGC	CGGGGCCTCG	GCCGGTTGAC	CGATCCGGGT	CACGCGCCCC	GCCGGGCGGG
490	500	510	520	530	540
CGGCCACGTC	CGGTCTCGCC	CCGCCCGACA	TCGGCTGCGA	CTGCCTTCGC	TCGCACTTCT
550	560	570	580	590	600
TCCCGCCTCC	CGGCCGCGTT	TTTCCGCCGC	CGAAGGTGCG	GCGACGCGTA	CCGAATCCCC
610	620	630	640	650	660
CTTCATCGCG	ACGTGCTTCC	GCACGCCCGC	GTTCAACGAT	GTTCCACGAC	AAAGGAGTTG
CAGGTTTCC					

GATCTTCCGG GACATCTGAG GCGCCGGAGG CGATCCGAGG CGCCCGAGGC GTCTGCGCGA 60  
AGGGCGCCGC CGTGCCGTCC ATCCCCGTCC GCGTCGACGC GGGCCGGGAG GGGGTGCGGC 120  
GGCGCCCTTC GGCTGTGTGG ACGAAGCGTC GGGTCGGAGG GGCGGCCGGA TATCGTCTTT 180  
GGGGCGGGGT GGCCGGAATT GCCGCCATGG TGTTGCCGGG GAATCGACCC GAAGACATGA 240  
TCACTTCTCG TATCCACCCG ATCACGTATC CGGGAGTCEA GAAGTGTAC GCCGTGCCCC 300  
TGTCCGCGTC CTCACCCCTG TCGCCGTGAC AGCGACCCGC GTTCTTCCAC TCGCACGGAC 360  
GGCCCCACAG GACCTTTCGG CCCGGGCTCG CCCC GCCGCC TCGGTGACGG CCTCCGAATA 420  
ACGCGGCCGC CGGGGCTCG GCCGGTTGAC CGATCCGGGT CACGCGCCCC GCCGGGCGGG 480  
CGGCCACGTC CGGTCTCGCC CCGCCCGACA TCGGCTCGA CTGCCTTCG TCGCACTTCT 540  
TCCCGCTCC CGGCCGCGTT TTTCCGCCGC CGAAGGTGCG GCGACGCGTA CCGAATCCCC 600  
CTTCATCGCG ACGTGCTTCC GCACGGCCG GTTCAACGAT GTTCCACGAG AAAGGAGTTG 660  
CAGGTTTCC ATG CGC ATA CGC CGG AGA GCT CTC GTC TTC GCC ACT ATG AGT  
Met Arg Ile Arg Arg Arg Ala Leu Val Phe Ala Thr Met Ser>  
1 5 10

720  
GCG GTG TTA TGC ACC GCC GGA TTC ATG CCG TCG GCC GGC GAG GCC GCC  
Ala Val Leu Cys Thr Ala Gly Phe Met Pro Ser Ala Gly Glu Ala Ala>

780  
GCC GAC AAT GGC GCG GGG GAA GAG ACG AAG TCC TAC GCC GAA ACC TAC  
Ala Asp Asn Gly Ala Gly Glu Glu Thr Lys Ser Tyr Ala Glu Thr Tyr>

840  
CGC CTC ACG GCG GAT GAC GTC GCG AAC ATC AAC GCG CTC AAC GAA AGC  
Arg Leu Thr Ala Asp Asp Val Ala Asn Ile Asn Ala Leu Asn Glu Ser>

900  
GCT CCG GCC GCT TCG AGC GCC GGC CCG TCG TTC CCG GCC CCC GAC TCC  
Ala Pro Ala Ala Ser Ser Ala Gly Pro Ser Phe Arg Ala Pro Asp Ser>

GAC GAC AGG GTC ACC CCT CCC GCC GAG CCG CTC GAC AGG ATG CCC GAC  
Asp Asp Arg Val Thr Pro Pro Ala Glu Pro Leu Asp Arg Met Pro Asp>

960  
CCG TAC CGT CCC TCG TAC GGC AGG GCC GAG ACG GTC GTC AAC AAC TAC  
Pro Tyr Arg Pro Ser Tyr Gly Arg Ala Glu Thr Val Val Asn Asn Tyr>

1020  
ATA CGC AAG TGG CAG CAG GTC TAC AGC CAC CGC GAC GGC AGG AAG CAG  
Ile Arg Lys Trp Gln Gln Val Tyr Ser His Arg Asp Gly Arg Lys Gln>

1080  
CAG ATG ACC GAG GAG CAG CGG GAG TGG CTG TCC TAC GGC TGC GTC GGT  
Gln Met Thr Glu Glu Gln Arg Glu Trp Leu Ser Tyr Gly Cys Val Gly>

1140  
GTC ACC TGG GTC AAT TCG GGT CAG TAC CCG ACG AAC AGA CTG GCC TTC  
Val Thr Trp Val Asn Ser Gly Gln Tyr Pro Thr Asn Arg Leu Ala Phe>

GCG TCC TTC GAC GAG GAC AGG TTC AAG AAC GAG CTG AAG AAC GGC AGG  
Ala Ser Phe Asp Glu Asp Arg Phe Lys Asn Glu Leu Lys Asn Gly Arg>

1200  
CCC CGG TCC GGC GAG ACG CGG GCG GAG TTC GAG GGC CGC GTC GCG AAG  
Pro Arg Ser Gly Glu Thr Arg Ala Glu Phe Glu Gly Arg Val Ala Lys>

1260  
GAG AGC TTC GAC GAG GAG AAG GGC TTC CAG CGG GCG CGT GAG GTG GCG  
Glu Ser Phe Asp Glu Glu Lys Gly Phe Gln Arg Ala Arg Glu Val Ala>

Fig.5

1320  
 TCC GTC ATG AAC AGG GCC CTG GAG AAC GCC CAC GAC GAG AGC GCT TAC  
 Ser Val Met Asn Arg Ala Leu Glu Asn Ala His Asp Glu Ser Ala Tyr>

1380  
 CTC GAC AAC CTC AAG AAG GAA CTG GCG AAC GGC AAC GAC GCC CTG CGC  
 Leu Asp Asn Leu Lys Lys Glu Leu Ala Asn Gly Asn Asp Ala Leu Arg>

AAC GAG GAC GCC CGT TCC CCG TTC TAC TCG GCG CTG CGG AAC ACG CCG  
 Asn Glu Asp Ala Arg Ser Pro Phe Tyr Ser Ala Leu Arg Asn Thr Pro>

1440  
 TCC TTC AAG GAG CGG AAC GGA GGC AAT CAC GAC CCG TCC AGG ATG AAG  
 Ser Phe Lys Glu Arg Asn Gly Gly Asn His Asp Pro Ser Arg Met Lys>

1500  
 GCC GTC ATC TAC TCG AAG CAC TTC TGG AGC GGC CAG GAC CGG TCG AGT  
 Ala Val Ile Tyr Ser Lys His Phe Trp Ser Gly Gln Asp Arg Ser Ser>

1560  
 TCG GCC GAC AAG AGG AAG TAC GGC GAC CCG GAC GCC TTC CGC CCC GCC  
 Ser Ala Asp Lys Arg Lys Tyr Gly Asp Pro Asp Ala Phe Arg Pro Ala>

1620  
 CCG GGC ACC GGC CTG GTC GAC ATG TCG AGG GAC AGG AAC ATT CCG CGC  
 Pro Gly Thr Gly Leu Val Asp Met Ser Arg Asp Arg Asn Ile Pro Arg>

AGC CCC ACC AGC CCC GGT GAG GGA TTC GTC AAT TTC GAC TAC GGC TGG  
 Ser Pro Thr Ser Pro Gly Glu Gly Phe Val Asn Phe Asp Tyr Gly Trp>

1680  
 TTC GGC GCC CAG ACG GAA GCG GAC GCC GAC AAG ACC GTC TGG ACC CAC  
 Phe Gly Ala Gln Thr Glu Ala Asp Ala Asp Lys Thr Val Trp Thr His>

1740  
 GGA AAT CAC TAT CAC GCG CCC AAT GGC AGC CTG GGT GCC ATG CAT GTC  
 Gly Asn His Tyr His Ala Pro Asn Gly Ser Leu Gly Ala Met His Val>

1800  
 TAC GAG AGC AAG TTC CGC AAC TGG TCC GAG GGT TAC TCG GAC TTC GAC  
 Tyr Glu Ser Lys Phe Arg Asn Trp Ser Glu Gly Tyr Ser Asp Phe Asp>

1860  
 CGC GGA GCC TAT GTG ATC ACC TTC ATC CCC AAG AGC TGG AAC ACC GCC  
 Arg Gly Ala Tyr Val Ile Thr Phe Ile Pro Lys Ser Trp Asn Thr Ala>

CCC GAC AAG GTA AAG CAG GGC TGG CCG TGA TGTGAGC GGGGTGGAGG  
 Pro Asp Lys Val Lys Gln Gly Trp Pro \*\*\*>

1920  
 GGAGCCGGTT GCCCGGCTCC CCTCCACCCT CTCCCCGCC ACCACGAAAG TCGCTACAGC

1980  
 TCGTGTCCCG TCGTGTCTGC GACGTGCGCC GGGAGTTCGC CCTCGTGGCG GTCGCCCCGC

2040  
 GTCCGGGTGC CCGTGGGTTC GAACATGAGG ATGGAGGCGC CCGGGGAGGA CGGCTTGTGT

2100  
 TCGGTGCCCT TGGGCACCAC GAAGGTGTGC CCCTTGTGCA GGCACACCGT GTGTCCGTT

2160  
 CCGTCGGAGT CGCGGAGCGC CACGTCAAG CGGCCGTCCA GGACGAGGAA GAACTCGTCG

2220  
 GTGTCCCTCGT GGACGTGCCA GACGTGCTCG CCTCGGTGT GGGCGACCG GACGTCTAG

2280  
 TCGTTCATGC GGGCGACGAT GCGCGGGCTG TAGACGTCGT CGAAGGAGGC GAGGGCCTTG

2340  
 GCGAGGTTGA CGGGCTCGGT GTCGTTTCATG GTCCGAGTCT CGGCGGAGC CCGCCGCGGC

GTC

Fig.6

	Amount of BTG in culture supernatant
ABL-1 : pUJ51BD / <i>S.lividans</i> 3131TS	0.7 g/L
ABM-1 : pUJ51BD / <i>S.mobaraensis</i> S-8112	0.5 g/L

Fig.7

